

STATEMENT OF WORK

ENGINEERING AND TECHNICAL SUPPORT SERVICES FOR FACILITIES PHYSICAL SECURITY
Investigations, Development, Fabrication, Test, Evaluations, Analysis,
and Reports of Physical Security Equipment and Criteria

20 August 1997

1.0 SCOPE.

1.1 PURPOSE. The purpose of this contract is to provide engineering development, theoretical analyses, study, surveys, testing and evaluation in support of the Naval Facilities Engineering Service Center (NFESC) development of physical security products, and security requirements and criteria. General categories of services to be rendered under separate delivery orders of this contract are:

- a. Operational and development testing of security products.
- b. Investigations, data collection, surveys and reports on a variety of physical security issues.
- c. Design and development of physical security products.
- d. Fabrication of prototype physical security products.
- e. Development and integration of mathematical models that analyze physical security operations and systems.
- f. Drafting associated with physical security research and development products.

1.2 BACKGROUND. NFESC is the technical consultant to the Chief of Naval Operations (CNO) Officer of Physical Security and Law Enforcement (Code OP009D) and the Naval Sea Systems Command (Code 6432). NFESC is also the principal development activity for all Naval Facilities Engineering Command (NAVFAC), RDT&E for facilities physical security, and is the center of criteria management for physical security criteria. As a result, NFESC is frequently tasked with a wide variety of assignments covering the full spectrum of RDT&E activities relating to physical security matters. Moreover NFESC is often tasked to generate new criteria, to revise and update criteria or to perform investigations related to the operations and maintenance of physical security systems.

Attachment (1)

2.0 APPLICABLE DOCUMENTS. The following documents are listed to illustrate a few reports of physical security products and to provide information on long range goals as shown in the Test and Evaluation Master Plan for Physical Security and the Five Year Plan FY-96. Documents applicable to a specific delivery order will be listed therein.

- a. Military Handbook 1013/1A - Design Guidelines for Physical Security of Facilities, June 1993
- b. Military Handbook 1013/11 - Instructions for Planning and Design of High Security Magazine Door Construction Project, September 1993
- c. Navy Security Measures for Executive Protection Manual, September 1990
- d. Navy Planning, Design, and Physical Security Measures for Emergency Command Control Centers Manual, May 1993
- e. Technical Data Sheet, TDS-2010-SHR - Neutralizing Red Label Class 6 Containers, June 1995
- f. DoD Lock Program Six Year Plan, Fiscal Year 1997-2002, November 1996

3.0 REQUIREMENTS.

3.1 GENERAL REQUIREMENTS.

a. The contractor shall:

- (1) Perform the work, which may include travel, described by the individual delivery order, per the Statement of Work (SOW) .
- (2) Provide facilities, equipment, in process documents, and personnel for in-process reviews at the contractor's facility.
- (3) Provide progress and funding reports of a nature and frequency as specified by individual delivery orders.

b. The Government shall:

- (1) Identify and provide Government Furnished Property (GFP) and/or Government Furnished Information (GFI) as specified/ required by individual delivery orders.
- (2) Facilitate access to NFESC and other government facilities, personnel, documents and publications considered essential to the contractors effort under the contract subject to a need-to-know

and security restrictions. Responsibilities of access and security, etc., remains with the contractor.

- (3) Schedule and conduct in-process reviews either at the contractor's facilities or at the COTR's office as required by individual delivery order.
- (4) Final inspection and acceptance of all work completed including any documentary material written or completed, will be performed at destination by the Director of Naval Facilities Engineering Command Contracts Office (NAVFACCO), at the Naval Construction Battalion Center (NCBC), Code 271, 621 Pleasant Valley Road, Port Hueneme, CA 93043-4300, or his/her duly authorized representative unless otherwise indicated in the individual delivery order.

c. Schedule.

- (1) A delivery schedule shall be defined in each individual delivery order issued here under.

3.2 SPECIFIC REQUIREMENTS. The following describes typical tasks which may be required under separate written delivery orders to the contract.

3.2.1 TEST AND EVALUATION. Provide facilities, personnel and equipment to test and evaluate a wide variety of physical security products. Example of some of the products to be tested are: magazine doors, personnel doors, window barriers, padlocks, high security internal locks and bolting systems and intrusion detection systems. Test products may be Contractor or Government furnished and may be installed and tested at Government or Contractor facilities. Test products may also require the development of automated modeling techniques. Provide documentation such as Test and Operation Plans, test reports and similar documentation as specified in individual delivery orders.

3.2.1.1 TESTING EXAMPLES. The following examples of testing may be required under this contract by separate delivery orders.

- a. Operational testing of physical security products (e.g., Operational, Reliability, and Durability under specified environmental conditions). These products may be installed at Government or Contractor sites and instrumental for operational testing.
- b. Forced entry penetration resistance testing using explosive charges, thermal attack using burn bar, and power tools.
- c. Testing of products to resist penetration by surreptitious techniques.

- d. Laboratory environmental testing of products, (salt, low/high temperature, vibration and shock).
- e. Mechanical testing of Physical Security products (i.e. explosive detection equipment, padlocks, seals, safes, containers).
- f. Performance testing of physical security products (e.g. explosive detection equipment)

3.2.1.2 EVALUATION EXAMPLES. The following examples of evaluation may be required under this contract by separate delivery order.

- a. Evaluate security products against Government requirements or standards.
- b. Regulatory considerations to determine if the equipment contains technology strictly controlled in certain countries (e.g. lasers, radiation hazards, and generation of hazardous material)
- c. Cultural considerations to determine use of invasive techniques which may be offensive or blasphemous to certain foreign nations.
- d. Operation, reliability and maintenance to determine:
 - (1) Cost to operate the equipment
 - (2) Maintenance requirements
 - (3) Availability of spare parts
 - (4) Space requirements
 - (5) Personnel requirements
 - (6) Energy requirements
 - (7) Skill levels required to operate equipment
 - (8) Training requirements
 - (9) Throughput rate

3.2.1.3 OTHER TESTING. Other Testing which may be required is as follows:

- a. Ballistics resistance of materials to 7.62mm NATO (M-80) rounds and

other high power rifle rounds.

- b. Penetration resistance of gate barricades by moving vehicles.

3.2.2 PREPARATION OF INVESTIGATION REPORTS AND DATA COLLECTION.

The following general types of tasks may be required under separate delivery orders.

- a. State-of-the-art literature investigation and report of Government and industry sources, concerning physical security technologies or products.
- b. Collection of product data from Government and industry sources.
- c. Preparation of reports using data generated under assigned delivery orders or from other sources.
- d. Preparation of security plans for Naval Shore Facilities.

3.2.2.1 INVESTIGATION AND REPORTS EXAMPLES.

Examples of investigations and reports of this type, which have been prepared by the Government are listed below. Similar studies may be required under separate delivery orders.

- a. Study of forced entry resistant personnel and magazine doors and other barriers for opening into secured structures.
- b. Definition of a structure penetration resistance rating system for physical security applications.
- c. Intrusion detection data collection.
- d. System Engineering.
- e. Cost effectiveness analysis.

3.2.2.2 FUTURE INVESTIGATIONS AND REPORTS.

Future investigations and reports which may be required by separate delivery orders are as follows:

- a. Preparation of product acceptance and implementation plans. The objectives of these plans are to insure that new products developed through the R&D program are made available and are utilized throughout the Department of Navy. The contractor may be required to identify conflicts in Government documents, (e.g., specifications, regulations, and instructions) and provide recommendations to ensure the proper utilization of the Government documents and security products.
- b. Preparation of:

- (1) Installation instructions and drawings for physical security equipment (e.g., locking hardware, secure personnel doors, magazine doors, and vehicle barriers)
 - (2) Security equipment operational and maintenance manuals. These manuals will be utilized by Government security and maintenance personnel.
 - (3) Lesson plans and instructors' guides used by Government physical security personnel to instruct and train others requiring specialized knowledge in various physical security subjects.
 - (4) Technical memorandums and contractors' reports and product sheets on physical security subjects. These reports may be prepared from data generated by the contractor or others.
- c. Investigation of properties of materials for use in penetration resistant security products (e.g., material and material composites to resist explosive, thermal, drilling, and abrasive attacks.
- d. Investigation of new and existing forced entry attack tools and methods (e.g., thermal and explosive device, high speed drills, surreptitious entry methods.)
- e. Investigation and evaluation of existing types of computer hardware and software for specific security related functions.

3.2.3 DESIGN AND DEVELOPMENT. The following lists task which may be required by separate delivery orders.

- a. Design and develop new or improve existing physical security products.
- b. Fabricate prototype products for testing.
- c. Construct scale models of physical products.
- d. Prepare drawings and specifications.
- e. Prepare military type specifications for security products.
- f. Prepare test plans and perform forced entry penetration test on physical security products.

3.2.3.1 PHYSICAL SECURITY PRODUCTS EXAMPLES. Examples of physical security products which are under development and whose development may be upgraded under this contract are as follows:

- a. Secure personnel and magazine doors.
- b. Locks and locking hardware.
- c. Window barriers.
- d. High security internal locking systems.
- e. Secure electrical/electronic locking systems.
- f. Vehicle gate barriers and electrical locking and operating systems.
- g. Security lighting.
- h. Automated mathematical models related to physical security research.

3.2.3.2 OTHER PHYSICAL SECURITY PROTOTYPE PRODUCTS. Other physical security prototype products which may be developed under this contract are as follows:

- a. Barriers against terrorist vehicle bomb attacks.
- b. Materials for secure structures.
- c. Safes and secure containers.
- d. High security padlocks.

4.0 FACILITIES. Work under this contract is to be performed in contractor facilities which have a SECRET facility clearance. Government equipment and facilities may be made available for performing portions of the anticipated work. When use of Government facilities and/or equipment is required or permitted, their use will be specified in the attendant delivery order.

4.1 FACILITY LOCATION. The contractor's shall be within a 200 mile driving radius of NFESC and shall be fully staffed with appropriate personnel and required reproduction, communication, word processing, and associated ancillary equipment required to successfully complete assigned delivery orders under this contract .

If the contractor does not currently have a fully staffed facility within the NFESC area, the contractor must include in his proposal a detailed plan for its establishment.

5.0 PERSONNEL CLEARANCE REQUIREMENTS. Personnel proposed to perform work under this contract, must be able to obtain a SECRET security clearance. In order to qualify for a personnel security clearance requires that the individual be a United States citizen.